Supplemental Table.1 Univariate analysis of mortality of breast cancer patients with initial brain metastasis.

Variables	Mortality	
	HR(95%CI)	P value
Age		
<60	Ref.	
≥60	1.26 (1.08,1.48)	0.004**
Sex		
Female	Ref.	
Male	1.1 (0.52,2.31)	0.811
Race		0.012*
White	Ref.	
Black	1.26 (1.03,1.53)	0.022*
Other ⁽¹⁾	0.78 (0.57,1.07)	0.12
AJCC T stage		0.519
1	Ref.	
2	0.92 (0.7,1.2)	0.524
3	1.01 (0.75,1.36)	0.937
4	1.06 (0.82,1.37)	0.637
AJCC N stage		0.56
0	Ref.	
1	0.97 (0.79,1.18)	0.733
2	0.83 (0.63,1.09)	0.181
3	0.98 (0.77,1.26)	0.892
Grade		0.044*
1	Ref.	
II	1.4 (0.89,2.21)	0.142
III	1.69 (1.09,2.64)	0.02*
IV	1.01 (0.41,2.52)	0.976
Unkown	1.53 (0.96,2.44)	0.075
Subtype		< 0.001***
HR+/HER2-	Ref.	
HR+/HER2+	0.78 (0.62,0.98)	0.03**
HR-/HER2+	1.04 (0.81,1.33)	0.782
HR-/HER2-	1.85 (1.51,2.25)	< 0.001***
Marital status		< 0.001***
Married	Ref.	
Unmarried ⁽²⁾	0.73 (0.62,0.87)	<0.001***
Unkown	1.01 (0.71,1.42)	0.965
Insurance status		0.025*
Insured	Ref.	
Uninsured ⁽³⁾	0.72 (0.53,0.98)	0.039*
Unkown	0.35 (0.14,0.89)	0.027*

Bone involvement No Ref. 0.91 (0.77,1.08) Yes 0.282 Liver involvement No Ref. Yes 1.21 (1.02,1.43) 0.027* Lung involvement No Ref. Yes 1.29 (1.1,1.51) 0.002** Surgery No Ref. Yes 0.64 (0.52,0.79) < 0.001*** Radiation No Ref. Yes 0.8 (0.67, 0.95) 0.013* Chemotherapy

Abbreviations: AJCC, American Joint Committee on Cancer ;Ref,Refrence.

No

Yes

Notes: data presented are HRs and 95% Cls. (1) including American Indian/AK Native, Asian/Pacific Islander; (2) including

Divorced/Separated/Single (never married)/ Unmarried or Domestic Partner/Widowed; (3) including Any Medicaid/Insured(No specifics).

Ref.

0.58 (0.49,0.68)

< 0.001***

^{*}P < 0.05; ** P < 0.01; *** P < 0.001